

ABSTRACT OF THE DISCLOSURE

A method of protecting a chemical compound from degradation comprising combining the chemical compound with an amino acid polymer also has been described. Disclosed are methods of combining chemical compounds with synthetic amino acid polymers for protection from degradation and to provide for controlled release of the compounds. A method is described for the selective release of drug substances from a synthetic amino acid polymer in the stomach or small intestine, utilizing pH-dependent changes in higher order structure. A pharmaceutical composition comprising a drug substance that has been combined with an amino acid polymer and a pharmaceutically acceptable combination of excipients is disclosed. A cell culture media comprising a polypeptide containing glutamine that has been co-polymerized with an amino acid is described.